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IN THE CLAIMS

This listing of the claim will replace all prior versions and listings of claim in the present application.

Listing of Claims

Claims 1-11 (canceled).

12. (new) A system of production planning, operable in response to a request for production planning from a terminal operated by a user, for supporting generating at least one of a plurality of plans including a material procurement plan, a production plan, and a transportation plan each used in a production activity beginning with supply of materials until transportation to a production point and/or to a marketing point by computer, said system comprising:

memory means that stores various restriction conditions and a restriction conditional equation relating various management indices to each other, said restriction conditions being actual or variable value = target value + positive estrangement from the target or variable value - negative estrangement from the target or variable value, wherein the management indices are derived based on various models including models for storage of parts, semi-products and/or products considered to be in a warehouse, flows of storage into the warehouse and of storage delivery from the warehouse;

input means that accepts various constants, information which selects the restriction conditions and the management indices, target value of the selected management indices, weighting coefficient corresponding to each of the selected management indices and flags for selecting whether the actual

value is optimized to be equal or greater or less than the target value of the management indices which are input by user upon production planning;

calculation process means that reads restriction conditional equations corresponding to management indices selected by the user from the memory means, builds an input target value of the selected management indices into the selected restriction conditional equation, multiplies each variable that stores a positive estrangement value or a negative estrangement value by the weighting coefficient and the flags, composes an objective function for minimizing the sum total of each estrangement value, and solves a linear programming problem that optimizes an objective function; and

output means that displays each actual value of the selected management indices, which the calculation process means calculates from solutions of the linear programming problem, on a display of said terminal in a form of a table, a radar chart or a rod graph,

wherein the input means receives input information from the user that are made of management indices to which the user desires change and/or adjusted target values of the management indices,

wherein the calculation process means remakes restriction conditional equations and the objective function according to the input information, repeats solving a linear programming problem, and calculating actual values of all the management indices for which an evaluation of trade-offs is necessary,

wherein the input means receives inputs from the user of a judgment that all the calculated actual values of the management indices can be allowed,

wherein the calculation process means calculates at least one of a materials procurement plan, a production plan of the products and/or the semi-products, and a transportation plan according to the final optimal solutions of the linear programming problem, and

wherein the output means outputs said calculated plans.

13. (new) The system of production planning, as is defined in the claim 12, wherein each of the management indices is a combination of at least one or more of inventory, profit, sales, cost, a rate of operation, fulfilling rate of demands from marketing point, cash which production activity produces, and an efficiency at which the production activity produces cash.

14. (new) The system of production planning, as is defined in the claim 12, wherein the memory means and the calculation process means are set up at a host server, the input means and the output means are set up at the user's terminal connected through the network with the host server.

15. (new) The system of production planning, as is defined in the claim 12, wherein when each actual value of management indices is displayed in radar chart form or rod graph form, with the management indices being the smaller, the better, the display values of coordinates or the length of rod are made larger in reverse proportion with the magnitude of the value.

16. (new) The system of production planning, as is defined in the claim 12, wherein the actual values of management indices and past result

values of the management indices are displayed on an output means in a form of a radar chart or a rod graph.